

## VIII. CONCLUSIONS

- Standardized Incidence Ratios for the period 1982-1992 indicate that there were no statistically significant elevations of any cancer type analyzed in Wayland. All cancer types investigated occurred approximately at rates that would have been expected or slightly elevated compared to the statewide cancer incidence experience. Lung cancer occurred significantly less often than expected among males in the town of Wayland and CT 3662. Cancer incidence in CT 3661 (the area of the Dow Chemical site) was generally less than expected based on statewide cancer incidence.
- During the years 1987-1994, cancer incidence generally occurred at or near the expected rates and most cancer types occurred at approximately the same rates observed during the 1987-1992 time period.
- Breast cancer occurred more often than expected among females in the town of Wayland and CT 3662 during 1987-1994. The majority of the cases were diagnosed at an early stage, rather than a later stage of the disease. Since breast cancer screening improves breast cancer detection at an early stage of disease, this finding suggests that females in Wayland had access to and utilized breast cancer screening.
- During the years 1987-1994, lung cancer was statistically significantly elevated among females in CT 3661. Evaluation of smoking status information for these cases revealed that the majority (i.e., greater than 65%) were current or former smokers at time of diagnosis, suggesting that smoking may have played a role in development of this cancer.
- Review of 1995 cancer incidence data do not indicate an unusual or excessive pattern of cancer incidence among Wayland residents and analysis of the geographic distribution of cancer incident cases for all the cancer types investigated did not reveal any unusual pattern or clustering of cases. No unusual geographic pattern of cancer cases was observed in either CT 3661 or CT 3662.

- Based on the health outcome data reviewed in this assessment, it seems unlikely that an environmental exposure (specifically, contamination associated with the Dow site) was responsible for increased cancer rates in Wayland. This conclusion is based upon the fact that there was no discernible pattern of elevated rates of cancer and there was no evidence of geographic clustering in the area of the Dow site. Evaluation of exposure pathways from contaminants present at the Dow site do not indicate that significant exposures were likely to have occurred to local residents. In addition, although past exposures to surface soil contamination at the Dow site could have occurred, based on the available information, the magnitude and frequency of these exposures would not be expected to have resulted in significant health risks. Lastly, based on all the information provided and reviewed, it does not appear likely that private drinking water wells could be impacted by the site.
- ATSDR requires that one of five conclusion categories be used to summarize findings of a health consultation. These categories are as follows: (1) Urgent Public Health Hazard; (2) Public Health Hazard; (3) Indeterminate Public Health Hazard; (4) No Apparent Public Health Hazard; (5) No Public Health Hazard. A category is selected from site-specific conditions such as the degree of public health hazard based on the presence and duration of human exposure, contaminant concentration, the nature of toxic effects associated with site-related contaminants, presence of physical hazards, and community health concerns. Based on ATSDR's criteria, ATSDR would classify the Dow Chemical site in the past, present, and future as posing No Apparent Public Health Hazard. This finding is based upon the fact that numerous sampling activities have occurred at the site and many of the compounds detected were either below ATSDR comparison values or MDEP cleanup standards. For those compounds for which no standard or guidelines exist, or for those compounds that exceeded comparison values, based on information reported by the community and others, it does not seem likely that area residents would have been exposed to those compounds. Finally, review of health outcome data does not suggest that the site has adversely impacted public health across the general population. This category does not conclude that any one individual may not have had opportunity in

the past for exposure to the Dow site, but rather that the data reviewed indicates that the site posed no public health hazard to the general population.